

- **Hurricane Season is Over. For a change, the experts were right...and with a Vengeance!**
- **ELEVATION CERTIFICATES. What are they all about?**

THE HURRICANE SEASON

Last spring's prediction by NOAA and the National Hurricane Center, among other weather prognosticators for an: "...above normal hurricane season..." was, not only on target, it was a monumental understatement. Florida was battered by more major hurricanes than had been anticipated, including four that made landfall, setting an all-time record for the state.

Given the extent and severity of these events, Key Biscayne residents must consider themselves lucky that the island suffered mostly glancing blows (no pun intended) and was spared any direct hits. While the Village was spared a direct hit, it was all too close for comfort, produced a great deal of anxieties and a lot of confusion, particularly on the subject of evacuation. We were buffeted by four "named" storms (i.e. where a Presidential Disaster Declaration has been issued) that swirled all around us that caused an estimated \$50 Billion in damages. The aftermath is a daunting challenge for Florida's economy and for its ability to resolve the property insurance dilemma.

A post mortem of the season reveals that the while the level of preparedness for dealing with hurricanes is much improved and the awareness of the hazards they involve is better and more extensively communicated, we are still far from perfect.

Indeed, the science of forecasting and tracking hurricanes has now advanced to the point where the path of a storm can be predicted and analyzed ad-nauseous. This is of course critically useful. However the range of probabilities within the predictions and the specificity of the path spawned a plethora of animated graphics that seemed to do more in showcasing weathermen than providing a true understanding of the weather event.

As a result, the evacuation orders lacked conviction and after the second storm, emergency management officials started to sound like: "the little boy who cried wolf".

Clearly, these are issues that warrant a focus of attention for the 2005 season, which according to longer term forecasts from weather scientists, is predicted to be "less active".

ELEVATION CERTIFICATES

The Village of Key Biscayne has been a participant in the National Flood Insurance Program (NFIP) since 1972, some 20 years before its incorporation as a Village in June 1991. In 1998, almost seven years ago, the Village joined and qualified for the "Community Rating System" (CRS) that currently entitles Key Biscayne residents to a 20% reduction in their flood insurance premiums.

The Rating System is structured in accordance with 18 activities that FEMA has identified as keys to reduce flood losses, facilitate accurate insurance rating, and promote awareness of flood insurance.

Communities in the program select the activities they propose to undertake. Their choice of activities and how well they are performed in terms of FEMA standards, form the basis for awarding the "rating" points which then determine the amount of flood insurance reduction.

Among the 18 activities, those that deal with **Public Information** and provide advice to residents about flood hazards, flood insurance and flood protection measures are paramount to the effective management of the Village's floodplain. Part of the Public Information activities deal with "**Elevation Certificates**".

It is a requirement of the National Flood Insurance Program...and thus a prerequisite for participation in the Community Rating System...that communities located in "Special Flood Hazard Areas" (SFHA), namely areas designated and mapped by FEMA as being particularly vulnerable, **maintain a record of the elevation of the lowest floor** of any new building or substantial improvement built within such areas. In the case of Key Biscayne, the entire Village has been identified by FEMA as a SFHA.

This record can take many forms, but the one officially recognized by FEMA and the insurance industry is the **Elevation Certificate**.

The reason for this requirement is that one of the greatest impediments in dealing with flood insurance is the difficulty of obtaining accurate flood insurance rating zone and building elevation data. This information is critical in assessing the vulnerability of a property to flooding and therefore its insurability.

As such, it is important to understand how the lowest floor the building to be insured, relates to the "Base Flood Elevation" (BFE) of the property on which it is located. Since the BFE is defined as the level reached by water in a flood having a **1% chance of being equaled or exceeded in any given year** (also known as a "100 year" or a "1% chance" flood, this is the elevation used to ensure that all properties subject to the National Flood Insurance Program are protected to the same degree against flooding).

Base Flood Elevations in a floodplain are calculated in accordance with official "Flood Insurance Studies" by FEMA that form the basis for "Flood Insurance Rate Maps" (FIRM).

The Elevation Certificate identifies the relevant information for locating the property on the FIRM, building elevation information, base flood elevation information and certifications from the architect, surveyor or engineer responsible for the technical information.

On Key Biscayne, the Village Department of Building, Zoning & Planning is responsible for securing Elevation Certificates from property owners and maintaining a record to assure compliance with NFIP regulations.

FEMA requires that communities make their elevation and related building information available for public inspection and insurance rating. As such the importance of Elevation Certificates and their availability should not be underestimated and emerge as a particularly important tool in floodplain planning and management.

ONGOING CONCERNS

FLOOD HAZARD

Any substantial flood experienced by Key Biscayne residents and property owners will likely come from a hurricane or tropical storm. Because Key Biscayne was not flooded recently, it can still be flooded in the future because the next weather event simply cannot be predicted. If you live in the Village of Key Biscayne, you are in a "Special Flood Hazard Area" inundated by 100-year flood frequency level. In other words, you are in an area prone to flooding where your property is apt to be damaged. This letter and other information you will receive periodically give you some idea of what you can do to protect yourself.

FLOOD WARNING

You should heed all hurricane and tropical storm warnings. These warnings will be broadcast through local television and radio stations, such as: WTVJ, Channel 4; WCIX, Channel 6; WSVN, Channel 7; and, WPLG, Channel 10 on TV; as well as: WQAM, 560 AM and WIOD, 610 AM on the radio.

FLOOD SAFETY

If an evacuation is ordered, you should proceed to rapidly evacuate to a point of safety such as a county shelter or other pre-arranged place. If you are disabled, under a doctor's care or require special help, you can register with the Metro-Dade County Office of Emergency Management by calling 273-6700.

Before you evacuate, there are a number of flood safety precautions to follow. Know appropriate escape routes, remember to turn off your electricity, house power and close all your windows, doors and shutters. If you have time, you can move your valuables and furniture to elevated areas that are less prone to water damage. Prepare emergency supplies of food, water, medicine and other essentials such as batteries, portable radio, candles, etc. so they will be readily available upon evacuation.

Do not walk through flowing water. Currents can be deceptive; six inches of moving water can knock you off your feet. If you walk in standing water, use a pole or stick to ensure that the ground is still there.

Do not drive through a flooded area. More people drown in their cars than anywhere else. Don't drive around road barriers; the road or bridge may be washed out.

Stay away from power lines and electrical wires. One of the greatest flood killers is electrocution. Electrical current can travel through water. Report downed power lines to FPL or the Metro Dade County Office of Emergency Management.

Look out for animals. Small animals that have been flooded out of their home may seek shelter in yours. Use a pole or stick to poke and turn things over and scare away small animals.

Look before you step. After a flood, the ground and floors are covered with debris, including broken bottles and nails. Floors and stairs that have been covered with mud can be very slippery.

FLOOD INSURANCE

If you don't have flood insurance, talk to your insurance agent. In preparation of the hurricane season, you should check that your flood insurance coverage is in effect. Homeowner's insurance policies do not cover damage from floods. However, because Key Biscayne participates in the National Flood Insurance Program, you can purchase a separate flood insurance policy. This insurance is backed by the Federal government and is available to everyone, even for properties that have been flooded. Some people have purchased flood insurance because the bank required it when they got a mortgage or a home improvement loan. Usually, these policies just cover the building structure and not the contents.

During the kind of flooding that happens in the Village of Key Biscayne, there is usually more damage to the furniture and contents than there is to the structure. If you are covered, check out the amount and make sure you have content coverage. For most people, their home and its content represent their greatest investment. Protect your property by obtaining flood insurance if you have not already done so. Remember: Even if the last flood missed you or you have done some floodproofing, the next flood could be worse.

Remember also that there is normally a waiting period before flood insurance takes effect, so do not wait until a storm warning to talk to your insurance agent.

PROPERTY PROTECTION/FLOODPROOFING

There are several different ways to protect a building from flood damage. One way is to keep the water away by re-grading your lot, or building a small floodwall or earthen berm.

These methods work if your lot is large enough, if flooding is not too deep, and if your property is not in the floodway. The Key Biscayne Building, Zoning and Planning Department can provide this information.

Another approach is to make your walls waterproof and place watertight closures over the doorways. This method is not recommended for houses with basements, or if water will get over two feet deep.

A third approach is to raise the house above flood levels. The Village Building Official can provide information and site specific advice on such measures.

Some houses have sewers that back up during heavy rains. A plug or standpipe can stop this if water does not get more than one or two feet deep. They can be purchased at the hardware store for less than \$25.00. For deeper sewer backup flooding, talk to a plumber about overhead sewers or a backup valve.

If you know a flood is coming, you should shut off the electricity and move valuable contents upstairs. It is unlikely that you will get much warning, so a detailed checklist, prepared in advance, would help insure that you don't forget anything.

PERMIT REQUIREMENTS

The above measures are called floodproofing or retrofitting. More information is available at the Key Biscayne Public Library. Please bear in mind that any alteration to your building or land requires a permit from the Building, Zoning and Planning Department. Even re-grading or filling requires a permit.

Always check with the Building, Zoning and Planning Department before you build on, alter, re-grade or place fill on your property. A permit may be needed to ensure that projects do not cause problems on other properties. If you see building or filling without a Village Permit sign posted, contact the Building, Zoning and Planning Department at 365-5512.

SUBSTANTIAL IMPROVEMENTS

The so-called "substantial improvement" rule applies to all work done to an existing structure, including additions during the preceding year. If the total dollar value of this work exceeds 50% of the market value of your structure (not including the value of the land) your entire structure will need to be raised to base flood elevation or otherwise floodproofed to withstand floods reaching base flood elevation. The Federal government requires the Village to have an ordinance enforcing this rule. A copy of this Ordinance may be obtained through the Building, Zoning and Planning Department. Failure by the Village to effectively enforce the Substantial Improvement Rule may result in virtual unavailability of Flood Insurance on Key Biscayne.

DRAINAGE MAINTENANCE

The Village of Key Biscayne minimizes flood damage by constructing, improving and maintaining a storm drainage system. The Village cleans all catch basins at least twice a year to insure efficient operation. The newly installed storm drainage system consists of catch basins connected to state-of-the-art deep injection wells. Effective maintenance by our Public Works Department combined with the new storm drainage system should minimize potential flood damage.

These efforts on the part of the Village require your cooperation and assistance. Here's how you can help:

Do not dump or throw anything into ditches and water channels. Dumping is a Village Ordinance violation. Even grass clippings and branches can accumulate and plug channels. A plugged channel cannot carry water and, when it rains, the water has to go somewhere. Every piece of trash contributes to flooding.

If your property is next to a ditch or a channel, please do your part and keep the banks clear of brush and debris. The Village can help remove major blockages, such as downed trees.

If you see dumping or debris in ditches or channels, contact the Village Public Works Department at 365-8945.

NATURAL AND BENEFICIAL FUNCTIONS OF FLOODPLAINS

The undisturbed areas on Key Biscayne that exist in a natural state perform a number of beneficial functions with respect to the hazards of flooding. They moderate the amount of flooding, they retain floodwaters, they reduce erosion and sedimentation damages, and they mitigate the effects of waves and storm surges from storms. Additionally they provide habitat for fish and wildlife.

For these reasons, the Village of Key Biscayne is involved on many fronts in efforts to both:

Preserve its undisturbed public spaces such as short and long range the beach improvement programs and maintenance programs for the mangrove preserves along the bay fronts, and

Increase such areas through the conversion, on an opportunity basis, of unused paved areas to their natural state.

AVAILABILITY OF INFORMATION AND ASSISTANCE

Further information on all of the above subjects and more is available at the Key Biscayne Public Library. Just ask the librarian for the "Floodplain Management Section". Copies of the Flood Insurance Rate Map for Key Biscayne are also available at the Library and at the Village Hall, Department of Building, Zoning and Planning.

The Department maintains a record of Elevation Certificates that have been issued and, if requested, it will provide technical assistance and information, on resolving problems related to flooding, flood insurance, floodproofing and flood damage prevention. If necessary, site visits will be made to individual properties to review problems and help with solutions.